



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,045	07/31/2001	Ramesh Nagarajan	129250-002077/US	4258
32498	7590	07/24/2008	EXAMINER	
CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC			PHAM, BRENDA H	
P.O. BOX 1995			ART UNIT	PAPER NUMBER
VIENNA, VA 22183			2616	
			MAIL DATE	DELIVERY MODE
			07/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/919,045	NAGARAJAN ET AL.	
	Examiner	Art Unit	
	BRENDA PHAM	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 29 April 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4 and 6-14 is/are rejected.
 7) Claim(s) 5 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 July 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. Claims 1-14 are pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 3, 4, 7, 10-11, 13-14 are rejected under 35 U.S.C. 103(a) as being anticipated by Callon (US 6,256,295 B1).

Regarding claims 1, 6, 8 and 12 Callon discloses an apparatus and method for use in a node of a network (see NODE of FIG. 3), the method comprising the steps of:

receiving a connection request (“**step 110 determines whether additional non-overlapping paths are needed. This determination may be based on a specific number of non-overlapping paths requested by the user or network administrator.**” Col. 6, lines 35-40); and

assigning a link resource selected from link resources that have been released for connecting to a neighboring node by using at least one predefined sequence (**predetermined sequence is path 80 shows in Figure 4C**), (“**TENT database 75 and PATNS database 80 are used by the Dijkstra-based algorithms to determine such**

a path. Forwarding database 85 stores the calculated based path and allows routing engine 65 to perform a simple lookup to determine the path for forwarding a packet to the destination node." Col. 4, lines 30-35) to avoid contention resulting from the request (Callon discloses methods and computation for determining multiple non-overlapping or minimally-overlapping paths to avoid contention resulting from the request, Col. 2, line 45-50);

wherein the at least one predefined sequence resulted from a negotiation with the neighboring node prior to receipt of the request ("Each node of network 10 generates its own link state packet that includes information regarding its neighbor nodes including the identity of each neighbor node and the cost associated with reaching each neighbor node. When node 50 has received link state packets from every node of network 10, node 50 will have a complete map of the topology of the network stored in link state database 70. Routing engine 65 may use the information stored in link state database 70 to determine paths between node 50 and any other node of the network." Col. 4, lines 19-29).

Regarding claim 2, 9, Callon further discloses wherein the assigning step includes accessing a table for selecting the link resource for assignment to the connection request (see PATH table 80 of FIG. 4C), the table comprising link resources arranged in accordance with the at least one predefined sequence (PATH [A,B,G,H], see PATH 80 of FIG. 4C), wherein the link resources comprises ports of the node associated with the link (See Port 55 of FIG. 3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4, 7, 10-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Callon (US 6,256,295 B1).

Regarding claims 3-4, 7, 10-11 and 13-14, Callon discloses method and apparatus for determining multiple minimally-overlapping paths between nodes in a network. The system determines a first path between the source node and the destination node.

Callon does not teach the method is implemented in an optical transport network.

It is well known in the art that when a large network deploys a new architecture, it is highly desirable to reuse the existing node sites and physical routes as much as possible due to the costs of land, equipment and construction. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the4 method of Callon in an optical transport network.

Allowable Subject Matter

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior arts made of record fail to teach or fairly suggest in combination wherein the negotiation with the neighboring node prior to receipt of the request results in at least two predefined sequences, a first sequence and a second sequence; and further wherein the assigning step includes; determining if the connection request is a bi-directional request or a unidirectional request; if a bi-directional request, selecting a first table, the first table comprising link resources arranged in accordance with the first sequence; if a unidirectional request selecting a second table, the second table comprising link resource arranged in accordance with the second sequence; and selecting the link resource from the selected table for assignment to the connection request and wherein the link resources comprise wavelengths of the node associated with the link.

8. The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure.

Phelps et al (US 2002/0118636 A1) discloses mesh network protection using dynamic ring.

Spiegel et al (US 5,649,108) discloses combined progressive and source routing control for connection oriented communication networks.

Lu et al (US 2002/0191247 A1) discloses fast restoration in optical mesh network.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

July 18, 2008

/Brenda Pham/

Primary Examiner, Art Unit 2616